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ABSTRACT

The review covers: (1) the discipline (description, scientific theories and principles, its practice, contributions to the health field, and history); (2) the profession (a doctor profile, patients, students, and the American Chiropractic Association); (3) chiropractic education (colleges, career opportunities, standard basic curriculum, accreditation, and continuing education); and (4) the state of the art (the Foundation for Chiropractic Education and Research, typical research programs, comparative cost studies of industrial back injuries, recent studies on the profession, educational requirements for licensure, chiropractic in foreign countries, and typical questions asked about the profession). (MSE)

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CHIROPRACTIC

State of the Art

FEBRUARY 1977

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II

CHIROPRACTIC STATE OF THE ART

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I. THE DISCIPLINE

A. Description

Chiropractic is a branch of the healing arts which is concerned with human health and disease processes. Doctors of chiropractic are physicians who consider man as an integrated being, but give special attention to spinal mechanics and neurological, muscular, and vascular relationships.

All states (and Puerto Rico) have statutes recognizing and regulating the practice of chiropractic as an independent health service. In 1929, the Congress of the United States passed a law for licensing of chiropractors in the District of Columbia.

The practice of chiropractic is officially regulated in nine of the provinces of Canada, in Switzerland and in West Germany, and is acknowledged and accepted in the Scandinavian countries, France, Italy, the British Isles, Australia, New Zealand, South Africa, Rhodesia, Japan, and Bolivia.

B. Scientific Theories and Principles of Chiropractic

Chiropractic is built upon three related scientific theories and principles.

1. Disease May Be Caused by Disturbances of the Nervous System

While many factors impair man's health, disturbances of the nervous system are among the most important factors of disease etiology. The nervous system coordinates cellular activities for adaptation to external or internal environmental change. Environmental agents and conditions which irritate the nervous system, and to which the body cannot successfully adapt, produce fluctuations in the pattern of nerve impulses deviating from the norm. Thus originate many diseases.

2. Disturbances of the Nervous System May Be Caused by Derangements of the Musculoskeletal Structure

Off-centerings (subluxations) of vertebral and pelvic segments represent a common mechanical pathology in man, the biped. Extended abnormal involvement of the nervous system may result from disturbances, strains, and stresses arising within the musculoskeletal system due to man's attempt to maintain this erect posture. The mechanical lesion, or **subluxation**, is a common result of gravitational strains, asymmetrical activities and efforts, and developmental defects or other mechanical, chemical, or psychic irritations of the nervous system. Once

produced, the lesion becomes a focus of sustained pathological irritation which may trigger a full-fledged syndrome of severe nerve-root irritation of compression.

3. Disturbances of the Nervous System May Cause or Aggravate Disease in Various Parts or Functions of the Body

Vertebral and pelvic subluxations may be involved in common functional disorders of an organic visceral and vasomotor nature, and at times may provoke phenomena that relate to the special organs. Under predisposing circumstances, almost any component of the nervous system may directly or indirectly cause reactions within any other component by means of reflex mediation.

The conjunction of independent causes of bodily dysfunction may jointly have more serious debilitating effects than either cause might have had separately. Subluxation may contribute to the "triggering" or exacerbating of migrainous types of headaches, asthmatic syndromes, and certain types of neurovascular and neurovisceral instabilities. Often correction of the spinal lesions is an imperative toward effective total management of the case.

C. The Practice of Chiropractic

1. Diagnostic Methods

The initial interview and consultation with the patient is of utmost importance. Every measure of observation that will more substantially profile the patient is employed and recorded. The doctor of chiropractic conducts a systematic and thorough physical examination using the methods, techniques, and instruments that are standard with all health professions. In addition, he includes a postural and spinal analysis, an innovation in the field of physical diagnosis and examination.

The chiropractic physician uses the standard procedures and instruments of physical and clinical diagnosis and is well acquainted with the need for differential diagnosis. Diagnostic radiology, especially as it relates to the skeletal system, is a primary clinical diagnostic aid in chiropractic—and has been since the early 1900's.

In addition, doctors of chiropractic are knowledgeable in the standard and special clinical laboratory procedures and tests usual to modern diagnostic science. Each college accredited has a laboratory licensed to carry on clinical laboratory examinations, including such fields as cytology, chemistry, hematology, serology, bacteriology, parasitology, and electrocardiography.

2. Treatment Methods

Chiropractic treatment methods are determined by the scope of practice authorized by state law. In all areas, however, these methods do not include the use of prescription drugs or major surgery, thus avoiding the dangers therein. Essentially, treatment methods include the chiropractic adjustment, necessary dietary advice and nutritional supplementation, necessary physiotherapeutic measures, and necessary professional counsel.

The most characteristic aspect of chiropractic practice is the correction (reduction) of a subluxated vertebral or pelvic segment(s) by means of making a specific, predetermined adjustment. The purpose of this correction and its determination is to normalize the relations of segments within their articular beds and relieve the attendant neurological, muscular, and vascular disturbances.

Vitamin and mineral food supplementation can, if professionally supervised, serve to prevent the onset or assuage the existence of some types of dysfunction of the nervous system. If deemed necessary in case management, dietary regimens and nutritional supplementation are often advised as an adjunctive therapy.

Physiotherapeutic methods and procedures are frequently used as an adjunctive therapy to enhance the effects of the chiropractic adjustments. Such procedures may include the use of diathermy, galvanic currents, infra-red and ultra-violet light, ultrasound, paraffin baths, hot or cold compresses, acutherapy, hydrotherapy, heel or sole lifts, foot stabilizers, and other commonly utilized modalities. Taping and straping and other forms of minor surgery are often used in injuries of the extremities; and neck, lower back, elbow, knee and ankle injuries may call for the use of supportive collars and braces during recuperation to enhance the effects of corrective treatments during recuperation to assist healing and strengthening. Rehabilitative exercises, as a physical therapy, comprise an important aspect of professional counsel to assist recovery and prevent further strain.

Counsel is often given in such areas as dietary regimens, physical and mental attitudes affecting health, personal sanitation, occupational safety, lifestyle habits, posture, rest, work, and the many other activities of daily living which would enhance the effects of the chiropractic adjustment. Chiropractic is concerned with the total individual: his or her health, welfare, and survival.

Professional councils on roentgenology, orthopedics, and chiropractic diagnosis and internal disorders strive to keep the field abreast with the latest scientific and technological advancements. Councils on neurology, technic, physiotherapy, and sports injuries are also continually investigating even more efficient methodology.

3. Consultation and Referral

Under chiropractic care, a patient is either treated or

referred after a comprehensive differential diagnosis, arrived at by utilizing an orthopedic and neurological examination, an x-ray examination, laboratory procedures, or whatever other procedure is necessary to determine what type health care is best suited for the patient's complaint.

4. Scope of Practice

The practices and procedures which may be employed by doctors of chiropractic are based on the academic and clinical training received in and through accredited chiropractic colleges. These presently include, but are not limited to, the use of diagnostics and therapeutics, specifically including the adjustment and manipulation of the articulations and adjacent tissues of the human body, particularly of the spinal column; included is the treatment of intersegmental disorders for alleviation of related neurological aberrations. Patient care is conducted with due regard for environmental, nutritional, and psychotherapeutic factors, as well as first aid, hygiene, sanitation, rehabilitation, and physiological therapeutic procedures designed to assist in the restoration and maintenance of neurological integrity and homeostatic balance.

Since the practice of chiropractic is regulated in all states, and a number of foreign countries, the present scope of practice is necessarily determined locally by existing statutory enactment and judicial determination in the separate jurisdictions.

D. Contributions of Chiropractic to the Health Field

Chiropractic has developed several new areas of knowledge and refined other areas in the clinical aspects of human biology, physiology, and anatomy as they relate to the mechanics of the spine and pelvic areas and to their interrelation with the nervous system. Posture, kinesiology, neurology, roentgenology, and orthopedics have been stressed, as has the relationship between structural disorders and mental health.

The chiropractic profession regards disease processes as a result of the multiplicity of factors among which structural abnormalities and their effect upon the neurological component play important roles in relation to abnormal functional performance. Because of the body's structural and functional interrelationship, a structural disturbance may induce or aggravate disturbances in other organs, systems, and body areas not casually expected. It is for this reason that chiropractic is concerned with the total person.

As structure cannot be separated from function in man, neither should health care fail to recognize man's unification. Health care must embrace this structure/function viewpoint, not only in its gross aspects but also in its cellular, molecular levels—not only in its theory but also in its practical application.

The recognition that the human body has interent healing powers is common to all ages and cannot be separated from considering man as a total unit. There principles are ancient in origin; what is new to this century is chiropractic's re-emphasis of such doctrines. Just as life is defined as the ability to respond to a stimulus, health in man must be considered the ability to compensate to internal and external stress. To neglect natural healing forces is to shun natural recovery-manpower reserves.

No one healing art offers a panacea to all of the problems confronted in the health sciences. Chiropractic is no exception; however, its emphasis on the importance of body resistance is a contribution which has yet to realize its full potential. All logical theory and therapy should be directed to recognition of individual differences and supportive of one's nature.

E. History of Manipulation and Chiropractic

The origin of tissue manipulation is lost in antiquity, but records indicate that it has existed throughout the world since the beginning of recorded time.

1. Anthropologist Unearths Prehistoric Chiropractic

"It has now been firmly established that spinal manipulative therapy significantly predates medical therapy and, it is fair to state, has been looked upon as the only acceptable form of therapy for the greatest part of man's experimental past." Thus writes Sir Austin Mowbry-Smyth, Sc.D., L.T.D., M.B.E., in his book: **Manipulative Therapy in Preliterate Europe: A Documentary Approach.**

Dr. Mowbry-Smyth, professor emeritus of cross cultural anthropology at All-Souls College, Oxford, notes that the construction of the Paris to Cannes subway system uncovered extensive prehistoric cave paintings at Point le Merd in southeastern France. "Truly an anthropological penticost; the significant breakthrough we've been hoping for but hardly expected!" Arranged in a series of mural-like representations, the pictures clearly depict spinal adjustments as delivered during the Aurignacian period (17,500 B. C.).

2. Early Manipulation

One of the earliest indications of tissue manipulation is demonstrated by the ancient Chinese Kong Fou Document written about 2700 B. C. which was brought to the Western World by missionaries. Also, Greek papyrus dating back to at least 1500 B. C. gave instructions on the maneuvering of the lower extremities in the treatment of low back conditions.

Tissue manipulation also was practiced by the ancient Japanese, Indians of Asia, as well as the Egyptians, Babylonians, Syrians, Hindus, and Tibetans. Manipulative therapy has been practiced by the natives of Tahiti for centuries .

Ancient American Indian hieroglyphics demonstrated "back walking" in which patients would have their backs manipulated by the feet of other persons. And, the early natives of the Polynesian Islands had their children walk on the backs of ailing adults. Some Indian tribes which used manipulative therapy were the Sioux, Winnebago and Creek Indians of North America as well as the Aztec, Toltec, Tarascan, Zoltec and Mayan Indians of Central America and South America. The sophisticated Inca Indians of South America were also known to practice manipulative methods.

3. Hippocrates and Claudius Galen

Hippocrates, the celebrated Greek physician who lived from 460 to 357 B. C., recognized the importance of spinal manipulation. A prolific writer, he wrote at least 70 books on healing, including **Manipulation and Importance to Good Health** and **On Setting Joints by Leverage.** Emphasizing the importance of the spine, he said, "Get knowledge of the spine, for this is the requisite for many diseases".

Claudius Galen, the famous Greek physician living from 130 to 200 A. D., was given the title, "Prince of Physicians" after he corrected a paralysis of the right hand of Eudemus, a prominent Roman scholar. He did so by treating the patient's neck, apparently adjusting the neck vertebrae. Galen, like Hippocrates, also recognized the importance of the nervous system when he said, "Look to the nervous system as the key to maximum health".

4. The Dark Ages

The fall of the Roman Empire to the Barbarians in 476 A. D. plunged mankind's years of accumulated knowledge into darkness. The prevention and treatment of disease took a backward step. Manipulative therapy also suffered a set back, often being clouded within the occult.

The art of spinal manipulation was not completely lost, even though it was ignored by the physician's guilds. During the Middle Ages and The Renaissance, this art of manipulation, often called "bonesetting," was handed down from parent to child and practiced in most communities of Europe and Asia. As time went on, the ancient "bonesetters" of Europe were considered "gifted" and often acquired great fame as healers. The famous surgeon, Sir James Paget, wrote in the British Medical Journal of January 5, 1865, an article entitled, "Cases That Bonesetters Cure."

In eastern Europe, gypsies were known to use trained bears for "back walking" to cure rheumatism and other illnesses.

5. The Discovery of Chiropractic

During the colonial days of our nation, the majority of doctors were without any formal medical education and practiced their healing art along with other occupations. Apprenticeship or self-training was the usual and almost exclusive path to becoming a doctor, even in the 1800s. A medical school was not part of Columbia University until 1860. And, it was not until the 1880s and later that states considered passing laws licensing the practitioners of medicine.

In the latter part of the 19th century, the healing arts were in an unorganized state. At least five different major philosophies of healing were practiced: allopathic medicine was just one concept. American doctors, particularly those without formal education, were inclined toward natural healing treatments. Some used diet, herbs and plants, exercise, electricity, purges, blood-letting, bone-setting, religious healing, "magnetic healing," etc.

After several occupations—including those of grocer and teacher—Daniel David Palmer became interested in healing the sick. He became a student of Paul Caster, an internationally known practitioner of magnetic healing, which was then in vogue at the time. Joseph Smith, the founder of the Mormon Church, was one of the magnetic healers of his time.

After several years of successful practice, Palmer's interest in ways to heal the sick led him to be critical of the confusion existing in the healing arts of his day. A classic experiment occurred in 1895 when Palmer had the opportunity to examine a janitor who became deaf 17 years previously after he felt something "give" in his back. Palmer examined the area and gave a crude "adjustment" to what was felt to be a misplaced vertebra in the upper spine. The janitor then observed that his hearing improved.

After further investigation, the word "chiropractic" was derived from the Greek words "cheir" and "praktikis" meaning "done by hand." Chiropractic was given a sophistication; a formal educational program was evolved; requirements by the schools were developed; and state governing laws were established.

Many people became attracted to the new science and healing art. Among the early students were Palmer's son, Bartlett Joshua; Palmer's lawyer, Willard Carver; as well as members of the older healing arts of medicine and osteopathy. Some of the prominent medical men of the time who became famous chiropractors were Drs. J. S. Riley, A. L. Forster, and A. J. Walton.

The first state law licensing chiropractors was passed in 1913, and by 1931 thirty-nine states had given chiropractors legal recognition. Today, about 15,500 practicing chiropractors are licensed in the 50

states; they are educated in 4-year colleges which prepare students to take state licensing examinations; in addition, students must have credits for 2 years of preprofessional college work to qualify for a degree. They must pass the same basic science examinations as osteopathic or allopathic physicians.

II. THE PROFESSION

A. Doctors of Chiropractic

As a qualified branch of the healing arts, the chiropractic profession is licensed as one of the branches of generic medicine in all states, the District of Columbia, Canada, Puerto Rico, and several foreign countries. All board-qualified and licensed chiropractors are entitled by law to use either the title **Doctor of Chiropractic** and/or **Chiropractic Physician.**

The Congress of the United States, with Presidential approval, has authorized the provision of chiropractic services under Federal law for all Americans in Medicare, Medicaid, under the Internal Revenue Code as a medical deduction, and specifically for Federal employees in the Federal Employee Health Benefit Program, in the Federal Employee Workmen's Compensation Program, in the Postmasters Benefit Program, in the Mail Handlers Benefit Program, and in leave approvals, under Civil Service, for illness suffered by Federal employees. Chiropractic health services are included in the Railroad Retirement Act.

For the purpose of the Federal Employees Compensation Program, the United States Department of Labor defined "physician" so as to include "chiropractor" and the Department's **Dictionary of Occupational Titles** includes doctors of chiropractic under the heading: "Chiropractor (medical ser.), 079.108 chiropractic: doctor, chiropractic."

The United States Department of Health, Education, and Welfare (a) has issued regulations for both Medicare and Medicaid which includes eligibility for chiropractic health services, and (b) the United States Office of Education recognizes accrediting status for the Council on Chiropractic Education (sponsored by the American Chiropractic Association and the Federation of Chiropractic Licensing Boards).

The United States Public Health Service classified doctors of chiropractic in a 1966 study as among "medical specialists and practitioners," along with pediatricians, obstetricians, and opthalmologists; included doctors of chiropractic along with medical doctors, surgeons, and dentists in its **Health Manpower Sourcebook,** and includes a chapter covering chiropractic in **Health Resources Statistics.** A chiropractic roentgenologist serves as consultant to the Bureau of Radiological Health, National Institute of Health.

The Ways and Means Committee of the U. S. House of Representatives issued a **National Health Insurance Resource Book** in 1974 in which a chapter devoted to "Information on Health Manpower", covering various health professions, offers a section on "Chiropractic Manpower".

The State Legislatures in all 50 states have licensed and approved the provision of chiropractic health services to their residents. Substantially all the states have authorized the provision of chiropractic health care under State Workmen's Compensation Laws, and the vast majority

of states have provided that all health and accident policies written in such states must also include chiropractic health services.

For the sake of maintaining high standards of professional competence, state chiropractic associations in the majority of states have sponsored legislation requiring continued education for continued licensure; assuming the leadership for such legislation among the healing arts.

Virtually all insurance carriers in the United States provide policies covering chiropractic health care. The Federal Medicare Law and State Medicaid Acts include doctors of chiropractic as primary health providers and recognize doctors of chiropractic as physicians employing a method by which particular attention is given to the structural and neurological aspects of the body in the prevention and treatment of health problems.

In the private sector of the American economy, (a) a number of major international, national, and local labor unions provide for chiropractic health services in their own health and welfare plans and/or have demanded chiropractic inclusion in proposed national insurance programs, and (b) major industrial employers such as General Motors have included chiropractic health care in the health plans for all their own employees.

There are some 13,729 doctors of chiropractic in the nation according to the U. S. Census of 1970. The majority of licensed practitioners are members of the American Chiropractic Association (ACA) and 90.5% are in general practice. During 1976, the membership of the American Chiropractic Association was listed at over 12,000 members.

B. Profile of a Typical Doctor of Chiropractic

The typical doctor in practice is a married male, 46 years of age, whose spouse is not employed. The couple have two children and have resided in a town of 31,000 population for 14 years.

In addition to graduation from a chiropractic college, the doctor has attended a college or university between one and one-half years, majoring in premedicine or the physical and biological sciences.

The doctor was 28 years old when he received his doctorate degree. He is qualified to practice his profession under state law in all states through examination before state basic science boards and/or state chiropractic boards. There is about a 20% chance that the doctor has attended a chiropractic college for formal postgraduate work since graduation.

This typical doctor of chiropractic is in solo practice, in an office with one employee. His office is located in a neighborhood business district, and he has been in the same location for 10 years.

The doctor practices an average of four and one-half days each week in which he attends to the needs of 100 patient visits. His income

and lifestyle are typical of that enjoyed by other primary health-care providers.

The doctor is a member of his national, state, and district professional associations. He is also an active and contributing member of local community and civic groups. He has a position of responsibility to his patients and his community and uses his professional abilities conscientiously and with integrity to serve those who depend upon him for proper health care and advice.

C. *Chiropractic Patients*

In 1963-64, 4½ million persons consulted a doctor of chiropractic or 2.3% of the civilian noninstitutional population (**Vital and Health Statistics,** series 10, No. 28, HCHS, May, 1966). While no current data are available, we do know from ACA resources that in 1976 there were approximately 15,500 DCs in active practice caring for an average of 100 patients per week for an average of 49 weeks per year. Thus, we can project that during 1976 alone there were about 73.5 million office visits made by approximately 7.4 million patients (10 visits-per-patient average), a substantial increase in utilization.

According to the most recent ACA survey, conditions classified as musculoskeletal accounted for over half of the four most frequently treated conditions and over half of the most successfully treated conditions. The second most frequently treated and the second most successfully treated classifications were conditions of the nervous system. These two classifications accounted for 77.3% of the four most successfully treated conditions.

Several surveys taken both within and without the profession have indicated that there is no measurable difference between chiropractic patients than those of any other healing art relative to age, sex, occupation, income status, education, or any other social factor.

D. *Chiropractic Student Profile*

According to a 197[illegible] ACA survey, the typical student attending the Los Angeles, National, Northwestern, Texas, and Western States chiropractic colleges during the 1972-73 academic year is male (7.2% female) and 26.4 years of age. About half of the students are married and have an average of one child. This typical student is a United States citizen (13.3% foreign). Slightly over half are born in communities of less than 100,000 population.

Prior to entering chiropractic college, he attended an accredited college and/or university for over two and one-half years during which he completed two courses each in biology and chemistry and one in physics. He was employed for at least a year before entering professional school.

He was a chiropractic patient (64.1%) and received information on chiropractic as a career from a doctor of chiropractic (65.5%).

There is about a fifty-fifty chance that after graduation he will practice in a community of 30,000-50,000 population.

There are more of him in school today than any year since 1966, and his quality is increasing with each enrollment. The 1976 Fall enrollment was the largest beginning class since 1963. The forthcoming years predict even higher enrollment.

E. The American Chiropractic Association (ACA)

The ACA is a national non-profit professional membership organization, staffed by some 40 personnel, having a working relationship with state chiropractic associations. Its major income comes from dues, publication sales, and convention exhibits. The ACA conducts the customary professional and other activities of a national health professional association.

As of December 1, 1976, the ACA had 12,033 members, representing the majority of licensed practitioners in the United States and serving as national spokesman for the profession. A primary objective of the ACA is to establish and maintain the standards of education, ethics, and professional competency necessary or desirable to meet the requirements of the profession and the expectations of society.

1. **Councils:** ACA-sponsored professional councils include areas of diagnosis and internal disorders, mental health, neurology, nutrition, orthopedics, physiotherapy, roentgenology, sports injuries, technic, and women chiropractors.

2. **Related Agencies:** Related agencies include such organizations as the American Chiropractic Auxiliary, The Foundation for Chiropractic Education and Research, the National Chiropractic Mutual Insurance Company, and The Council on Chiropractic Education.

3. **Technical Assistance:** Upon request, ACA provides counsel within the chiropractic profession and with other professions; organizations; government, health, and insurance agencies; and groups with health-related interests.

4. **Educational Services:** The Association develops, produces, and distributes extensive materials on a wide variety of health subjects by such means as films, slide programs with taped narrations, pamphlets, booklets, texts, posters, displays, and kits. The "ACA Educational Communications" price list indicates materials and supplies available as well as prices and ordering instructions. Also, vocational guidance materials are available.

Periodically the ACA sponsors regional seminars and workshops designed to maintain the professional competency of the profession,

to coordinate research activities, and to introduce technological and scientific findings.

5. **Research:** The ACA contributes 40% of its dues receipts to education and research through the facilities of the Foundation for Chiropractic Education and Research.

6. **Ethics:** The ACA has a Code of Ethics and established disciplinary procedures. It should be noted that state chiropractic associations also have such codes and procedures.

7. **Peer Review:** The ACA has published peer review guidelines and through qualifying leadership conferences has trained several hundred State Association Peer Review Committee members. Although the ACA does provide an appeal mechanism at the national level for the extraordinary situation, all primary review is done at state and local levels. Established review procedures provide service to doctors of chiropractic, third-party reimbursement organizations, and to patients when third-party reimbursement organizations are involved.

8. **Committees/Commissions:** The ACA maintains activities in such areas of interest as instrumentation evaluation, posture, senior citizens, student ACA, veteran affairs, HSA-HMO-PSROs, technic and procedures evaluation, insurance, industrial relations, labor relations, legislation, publications, and public health.

9. **Major Health Education Activities:** By way of various communications media, the ACA seeks to provide information of value to public health, safety, physical fitness, and disease prevention. The following are examples of such programs:

(a) Radio and television public service announcements designed to increase public awareness in matters of health. Subjects include accident prevention, problems of the senior citizen, need for periodic health examinations, importance of correct posture and physical fitness, and other topics deemed important to national health.

(b) Public service billboards, newspaper health columns, space announcements, and news releases designed to call public attention to health matters of national concern.

(c) ACA Councils participate in workshops and continuing education in such areas as diagnosis and internal disorders, mental health, neurology, nutrition, orthopedics, physiotherapy, roentgenology, sports injuries, and chiropractic techniques.

(d) ACA supports the activities of the Foundation for Chiropractic Education and Research (FCER) and The Council on Chiropractic Education (CCE).

(e) ACA sponsors "Correct Posture Month" in May of each year and "Spinal Health Month" in October of each year as continuing programs in health education.

(f) The Association serves as a national resource for current data and state-of-the-art information relative to the profession and its contribution to public health.

III. CHIROPRACTIC EDUCATION

A. Chiropractic Colleges

By the mid 1970's, four chiropractic colleges had become fully accredited and four colleges had been granted Recognized Candidate for Accreditation (RCA) status with the Council on Chiropractic Education (CCE), an autonomous corporation sponsored by the American Chiropractic Association and the Federation of Chiropractic Licensing Boards. All but a few Chiropractic Licensing Boards require that their applicants be a graduate of a college with CCE status.

The early 1970s witnessed increasing enrollments in all chiropractic colleges. In 1975, CCE-member schools had almost a thousand graduates. Total enrollment in these institutions was approximately 5,000 students engaged in a sophisticated course of specialized instruction.

Chiropractic colleges require a minimum of 4 academic years of professional resident study (not less than 4,200 clock hours), including clinical experience under strict supervision. For a major part of 2 years, the chiropractic student is educated in anatomy, biochemistry, microbiology, pathology, physiology, public health, diagnosis and x-ray, clinical disciplines, related health sciences, and chiropractic principles and practice. The remaining 2 years are devoted to practical or clinical studies dealing with the diagnosis and treatment of disease with approximately half of the time spent in the clinic.

The CCE and its Commission on Accreditation is recognized by the commissioner on education of the United States Office of Education, Department of Health, Education, and Welfare, as the reliable authority on the quality of training offered by chiropractic colleges.

Also, the CCE is recognized by the Council on Postsecondary Accreditation (COPA) for programs leading to the Doctor of Chiropractic degree. COPA, a private, nonprofit educational association evaluates and recognizes responsible accrediting agencies.

The CCE, in addition, is a member of the Council of Specialized Accrediting Agencies (CSAA), an autonomous, nongovernmental accreditation agency. CSAA fosters the maintenance of high standards within the spectrum of postsecondary education.

B. Career Opportunities

Wide acceptance and a rapidly increasing population make the future of chiropractic a boundless one. Further, an active program of research assures students who are planning a career in chiropractic that their profession will continue to grow and progress in its service capabilities. As research opens new doors for chiropractic procedures and service, new career opportunities are witnessed.

Not only are there more patients to serve, there are also more specialized ways in which to serve. The population growth, latest chiropractic research, greater acceptance and understanding, more need for health care, better financial ability, state and federal health program support, and greater health consciousness—all assure chiropractic a future of increased need and service. Chiropractic is a rapidly growing profession offering a career of opportunity and service to the dedicated.

There is approximately one doctor of chiropractic serving every 12,000 people in the United States. A more desirable ratio would be one DC for every 7,500 people. Obviously, there is an urgent need to be fulfilled. Literally hundreds of towns and cities throughout the United States and Canada are without any or adequate number of chiropractic physicians to offer patients this specialized health service. Few of even the largest cities have enough chiropractors in ratio to population and growing popularity.

The modern doctor of chiropractic is a particular type of physician. As such, he or she is engaged in the treatment and prevention of diseases and in the promotion of public health and welfare. Such a physician is thoroughly trained in all accepted methods of diagnosis. Also, he has the advantage of understanding the significance of structural and functional maladjustments which are always present in disease. His training equips him for this most important and difficult part of diagnosis and health care.

Chiropractic is a broad field. With a background in the basic and clinical sciences, and his knowledge of the advances made in the field of body mechanics, a doctor of chiropractic will find unlimited areas of service open to him as a general practitioner engaged in family practice, or as a specialist, teacher or researcher.

C. Standard Basic Curriculum

Below is a brief outline of the standard basic curriculum (1976) indicating subject matter and their minimum requirements.

Phase I—Basic Science Subjects (46%, 1840 hrs.)

- Anatomy—includes gross anatomy, embryology, and histology, with particular emphasis on neurology.
- Physiology—includes physiology of blood and lymph, circulation, respiration, excretion, digestion, metabolism, endocrine, special senses, and nervous system.
- Chemistry (inorganic, organic, biochemistry, and nutrition)—includes physical chemistry of foods, digestion and metabolism. Nutrition to include processing of foods and dietetics as applied to health and disease.
- Pathology—includes general and special pathology; Bacteriology—includes parasitology and serology.

- Hygiene, Sanitation, and Public Health—includes sanitation and hygienic procedures and regulations as well as the prevention of disease.

Phase II—Clinical Science Subjects (42%, 2080 hrs.)

- Physical, Clinical, Laboratory, and Differential Diagnosis.
- Gynecology, Obstetrics, and Pediatrics.
- Roentgenology, technique and interpretation.
- Geriatrics, Dermatology, Syphilogy, Toxicology, Psychology, and Psychiatry.
- Principles of Chiropractic—includes spinal analysis, adjustive techniques, orthopedics, and first aid.
- Jurisprudence, Ethics, and Economics.

Required administrative electives (2%, 80 hrs.) include such courses that may be selected by the college to be a part of the regular curriculum. In addition, 200 or more hours in optional administrative electives are required. Thus, the minimum grand total is 4,200 hours.

To assure that high educational standards are maintained, the CCE has established an eight-member Commission on Accreditation. Certain requirements must be met before a chiropractic college is considered for evaluation. First, requirements for a standard basic curriculum must be met. Second, prescriptions are set by the CCE for faculty qualifications, faculty-student ratios, library holdings, and physical plant as well as governance, administration, and financial stability. Third, a student entrance requirement of a minimum of at least 2 years of college work with a prescribed science content must be maintained.

D. Accredited and Recognized Colleges

As of early 1977, the following colleges have achieved status with The Council on Chiropractic Education:

Accredited Institutions

- Los Angeles College of Chiropractic
  920 East Broadway, Glendale, California 91205
- National College of Chiropractic
  200 East Roosevelt Road, Lombard, Illinois 60148
- Northwestern College of Chiropractic
  1834 Mississippi River Blvd., St. Paul, Minnesota 55116
- Texas Chiropractic College
  5912 Spencer Highway, Pasadena, Texas 77505

Recognized Candidates for Accreditation

- Columbia Institute of Chiropractic
  P. O. Box 167, Glen Head, New York 11545

- Logan College of Chiropractic
  430 Schoettler Road, Chesterfield, Missouri 63017
- Palmer College of Chiropractic
  1000 Brady Street, Davenport, Iowa 52803
- Western States Chiropractic College
  2900 N. E. 132 Avenue, Portland, Oregon 97230.

A college having RCA status indicates that the institution is in compliance with the basic eligibility requirements for accreditation through self-study and the consultative assistance of the Commission on Accreditation of The Council on Chiropractic Education. Such status is not accreditation, nor does it assure eventual accreditation.

Foreign Colleges

Currently, three foreign colleges are CCE-affiliate members. These colleges are:

- Anglo-European College of Chiropractic, Ltd.
  Bournemouth, Hampshire, England
- Canadian Memorial Chiropractic College
  Toronto, Ontario, Canada
- International College of Chiropractic
  Melbourne, Australia

E. Continuing Education

Recognizing that any healing art must keep abreast with new data and advanced procedures, the chiroapractic profession has supported continuing education as a yearly requirement for relicensure in 34 states as of early 1977. More states are supporting this effort each year. While the other healing arts have been reluctant in sponsoring such legislation or rulings, the chiropractic profession has offered leadership in the public interest assuring alert health care to the health consumer.

Voluntary programs are another important part of chiropractic continuing education. Each accredited chiropractic college maintains an ongoing Postgraduate (Continuing) Educational Division whose objective is to provide postgraduate education to better assist the doctor of chiropractic in the care of the public. Each Postgraduate Division or Department produces programs, courses, and seminars that are designed to upgrade the competence, knowledge, and ability of graduate doctors of chiropractic.

The ACA Council on Orthopedics and the Council on Roentgenology have programs leading to certification: diplomate status. ACA Councils on Neurology, Chiropractic Diagnosis and Internal Disorders, and Sports Injuries offer periodic postgraduate educational programs to enhance the practitioners' continuing education.

In addition, state chiropractic associations offer periodic educational programs at the state level for the benefit of their members. These

programs are frequently supplemented at the local level by programs conducted by chiropractic researchers and clinicians.

F. Institutional Recognitions

Chiropractic colleges are recognized throughout the nation at both the federal and state levels.

On the federal level, the U. S. Office of Education recognizes those colleges having status with the CCE and so lists them in the **Education Directory,** USOE, Department of HEW. Certified chiropractic colleges are eligible for guaranteed student loans, NDSL, student work-study programs, and Interest Assistance Programs. Chiropractic is listed in the **Occupational Handbook** of the U. S. Department of Labor. Chiropractic colleges are eligible for loans from the U. S. Department of Housing and Urban Development. In addition, the Veterans' Administration recognizes chiropractic institutions as institutions of higher education, and student visas for chiropractic students are granted by the U. S. Department of Immigration and Naturalization.

On the national level, a substantial number of accredited colleges in various states include a prechiropractic curriculum in their catalogs, and it is not an uncommon instance to witness the transfer of credit into regionally accredited institutions from chiropractic colleges. By early 1976, several chiropractic colleges had established cooperative programs with regionally accredited institutions of higher education.

State-funded scholarship and grant programs are available at recognized chiropractic institutions, and chiropractic students may qualify for Vocational Rehabilitation tuition and maintenance programs. While space does not allow the extensive recognitions offered chiropractic educational institutions on the state and area level, it is worthy to note that the National College of Chiropractic is an accepted candidate for accreditation by the North Central Association of Colleges and Secondary Schools and The Office of Superintendent of Public Instruction, State of Illinois, through its Advisory Council on Degree Granting Institutions has approved both the Bachelor of Science and the Doctor of Chiropractic degrees; for example.

IV. STATE OF THE ART

A. *The FCER*

No healing art, separately or in combination with others, has all the answers to the many problems of health and disease. While great advances have been made in recent years, much is still unknown. Thus, research is vital to seek more efficient solutions and procedures

The Foundation for Chiropractic Education and Research (FCER) is a non-profit organization established by the profession. It makes direct grants to colleges, grants for scholarship and faculty assistanceships, grants for research projects, and grants for support of the Council on Chiropractic Education (CCE).

The most important source of FCER funds is a percentage of the dues paid by the general members of the American Chiropractic Association. Other sources include memberships in the FCER itself, memorial giving, annual giving, donations earmarked for scholarships, interest on the FCER endowment fund, and bequests and wills.

Approximately 80% of FCER funds have been allocated directly to colleges for the purpose of upgrading their programs, assisting in their progress toward CCE accreditation goals, and for research. All of these programs benefit the public through progressive chiropractic care.

Admissions to chiropractic colleges are the highest since the post World War II era. The FCER, with the support of the ACA, is involved in a 10-year program to raise several million dollars, to support its purposes. A substantial percentage of dues from the membership of the ACA are directed to educational and research programs through the FCER.

B. *Typical Programs*

Research projects in both chiropractic colleges and universities outside the profession are supported by the chiropractic profession. During the early 1970's the FCER Supported research at the Rensselaer Polytechnic Institute. During the mid-1970's, the ACA through the FCER supported research in the University of Colorado at Boulder for well over $110,000. In addition, the FCER has supported research within chiropractic institutions for investigation into such areas as neutron radiography, sacroiliac mechanisms, spinal and pelvic clinical dynamics, chiropractic diagnostic instrumentation, fasting and starvation effects, dietary habits of students, synthesis of anti-tumor compounds, and neutron activation analysis.

The National College of Chiropractic is the recipient of a government grant to establish the validity of the x-ray exposure figures com-

piled by the National Evaluation of X-ray Trends Survey System (NEXT). These standards are used by the state health departments when inspecting the x-ray facilities of the scientific community.

The California Post-secondary Education Commission has recommended the application of the Los Angeles College of Chiropractic for a grant to the U. S. Commissioner of Education to improve undergraduate instruction which proposes to initiate a program of filmstrip production for histology, anatomy, and clinical diagnosis classes.

HEW and Labor Department appropriation bill for fiscal 1973-4 specifically earmarked funds for chiropractic research for as much as $2-million. These funds were included in the budget of the National Institute of Neurological Diseases and Stroke (NINDS) of the National Institutes of Health (NIH). One result was an international conference on spinal manipulative therapy where the chiropractic and medical professions met to discuss the scientific value of chiropractic therapy. The conference identified three areas of research where chiropractic might contribute to patient care: (1) Nerve root pathology is an area that as yet has not received much study. There is some evidence that nerve roots can be compressed and cause pain when there is damage to the soft tissues surrounding them; (2) There is a need to demonstrate whether x-rays are of any value in detecting nerve root damage; and (3) It is also necessary to ascertain what type of conditions respond best to chiropractic and to differentiate between those patients who might respond to this treatment and those who might not.

In 1975, a team of chiropractic and medical physicians in Toronto began development on an interdisciplinary project involving a double blind clinical study of chiropractic to determine the effectiveness of manipulation in treating acute low back pain. The team also established criteria for examination so that pre- and post-study criteria could be quantified. The project is to be conducted in cooperation of the Canadian Memorial Chiropractic College, the Department of Preventive Medicine of the University of Toronto, and the rehabilitation departments of Wellesley and Sunnybrook Hospitals, all of Toronto. The project is being supported by the Canadian Medical Association, Ontario Medical Association, the College of Physician and Surgeons, and the Ontario and Canadian Chiropractic Associations.

C. Comparative Cost Studies of Industrial Back Injuries

Studies of workmen's compensation records provide objective evidence of the efficacy of chiropractic care in the treatment of industrial injuries. From data supplied by Workmen's Compensation Commissions, comparisons of D. C. and M. D. treatment of industrial injuries have demonstrated dramatically that those cases under chiropractic care showed

reduced treatment costs, compensation costs, work-time losses, and workman disability and suffering.

1. *Florida.* A Florida study (First Research Corporation, "A Survey and Analysis of the Treatment of Sprain and Strain Injuries in Industrial Cases", 1961) indicates that treatment costs for substantially identical cases were 27.5% less for cases handled by D. C.s than for cases handled by M. Ds. The study further indicated that when a back or neck injury case was handled by an M. D. rather than a D. C. that (a) compensation costs averaged 311% more (under care by an M. D. and (b) work-time losses averaged 300% more (under care by an M. D.).

2. *Oregon.* The medical director of the Workmen's Compensation Board of the State of Oregon released the results of a similar study, "A Study of Time Loss Back Claims, 1971", which showed that of claimants treated by no other physicians than a chiropractor, 82% of these workmen resumed work after 1 week of time loss. These claims were closed wi[illegible] disability award. However, claimants treated by M. Ds., in whic[illegible]enosis seems comparable to the type of injury suffered by the w[illegible]ated by the D. C., 41% of these workmen resumed work after 1[illegible] time loss.

In a separate study of statistical information furnished by the Oregon Workmen's Compensation Board in 1971, a 24-month study limited to back-injury cases involving sprains and strains only found (a) $298.52 average total cost under care of M. D., as compared to (b) $72.92 average total cost under care of D. C. These average total costs include doctor and hospital costs plus compensable time loss.

3. *Kansas.* A survey of Kansas workmen's compensation records of 1971 shows (a) $102.53 average total cost under care by an M. D., as compared to (b) $65.69 average total cost under care of a D. C. These average total costs include doctor and hospital costs plus compensable time loss. This survey was also limited to back injury cases involving sprains and strains only.

4. *Iowa.* A comparison of the cost of D. C. vs. M. D. treatment is found in two Iowa studies covering the years 1966 and 1969. Average cost per case for M. D. treatment in 1966 was $118.74 and in 1969 was $210.86, as compared to average cost per case for D. C. care in 1966 of $68.24 and in 1969 of $79.28.

5. *California.* In December 1972, C. Richard Wolf, M. D., completed a study which was designed to compare time loss due to industrial back injury when treated by either a D. C. or an M. D., using the records of the Division of Labor Statistics and Research (Doctor's First Report of Work Injury). In summary, 1000 employees with industrial back injuries were questioned about the time lost and residual pain from injuries suffered. On the injuries reported, one-half had been treated by M. D. and one-half by D. C. physicians. Of the 1000 employees surveyed,

629 responded to the questionnaire. No degree of bias in study design could be determined, and there were no apparent major identifiable differences in the two groups with regard to age or employee categories. The major differences determined were:

	Employees Treated by M.D.s	Employees Treated by D.C.s
Average lost time per employee	32 days	15.6 days
Employees reporting no lost time	21.0%	47.9%
Employees reporting lost time in excess of 60 days	13.2%	6.7%
Employees reporting complete recovery	34.8%	51.0%

D. Recent Social Studies

1. A study conducted by the University of Utah School of *Medicine*, as reported in an article "Manipulating the Patient—A Comparison of the Effectiveness of Physician and Chiropractic Care" published in *The Lancet* of June 1974, shows that the intervention of a chiropractic physician in problems around neck and spine injuries was *at least* as effective as that of a medical physician in terms of restoring a patient's function and satisfying the patient.

2. In April 1974, Professional Viewpoints of St. Louis, Missouri, conducted an independent survey of public attitudes and opinions within the State of Ohio on certain issues related to the chiropractic profession. Facts derived from the survey indicate that (a) one out of every three families in Ohio has at least one member of the immediate family who has been to a doctor of chiropractic (b) four out of five persons expressing an opinion about chiropractors approve of them, and (c) of those persons who have gone to a chiropractor for a health problem, 87% have experienced relief.

3. In 1974, a study on the chiropractic profession was conducted as part of the manpower component of the Comprehensive Health Planning Council of Central Massachusetts, Inc. Some conclusions arrived at were:

a. Chiropractic, in theory and in practice, is a specialty concerned mainly with problems of a muscular-skeletal nature. A very small percentage of individuals visit the chiropractor for non-orthopedic problems. Chiropractic treatment of ailments not requiring surgery or drug therapy results in a high-reported recovery rate.

b. There is no justification for the common belief that *only* the uneducated, unskilled utilize chiropractic services.

c. The major reason for initially visiting a chiropractor is patient dissatisfaction with previous health care and treatment.

d. Of the individuals polled in mode of use, 21% utilized both M.D. and D.C., 26% consider a chiropractor their family doctor, and 89.8% consider a chiropractor a specialist.

e. The major reason for not using chiropractic services is lack of information about what it is, what it can do, and how it does it.

f. Rather than dissatisfaction, the major reason people discontinue their use of chiropractic care is financial. Those with insurance policies which do not include chiropractic coverage often cannot afford chiropractic care for extended periods of time.

4. In November 1976, the **LI Poll** (Long Island, N.Y.) asked a random and representative sample of Nassau and Suffolk county residents if they believed that doctors of chiropractic could do some beneficial things which other health practitioners could not. In response, 65% of the residents said that they felt DCs could offer such benefits, 21% felt they could not, and 14% were undecided. In analyzing the data, Professor Stephen Cole, a sociologist from the State University of Stony Brook, found that few demographic characteristics had any influence on these attitudes. Education, age, income, religion, and political orientation did not appear to affect responses to this question.

E. Educational Requirements for Licensure

The following table was prepared from the latest information obtained from The Council on Chiropractic Education and the Official Directory of the State Chiropractic and Basic Science Examining Boards as published by the Federation of State Chiropractic Examining Boards.

UNITED STATES

Jurisdiction	Non-Professional Education Required	Professional Education Required	Type of Examining Board
Alabama	High School	4 yrs. of 9 mo. each	†C
Alaska	2 yrs. College	4 yrs. of 9 mo. each	†C
Arizona	High School	4 yrs. of 9 mo. each—4,000 hours	†C
Arkansas	2 yrs. College (1)	4 yrs. of 9 mo. each—4,400 hours	†C-B
California	2 yrs. College	4 yrs. of 9 mo. each	†C-
Colorado	High School	4 yrs.—4,000 hours	†C
Connecticut	2 yrs. College	4 yrs. of 8 mo. each—4,000 hours	C
Delaware	2 yrs. College	4 yrs. of 9 mo. each	†C
Dist. of Columbia	2 yrs. College	4 yrs. of 9 mo. each	†C-B
Florida	2 yrs. College	4 yrs.—4,200 hours	†C
Georgia	2 yrs. College	4 yrs. of 9 mo. each	C
Hawaii	2 yrs. College	4 yrs. of 9 mo. each—4,200 hours	†C
Idaho	2 yrs. College	4 yrs. of 8 mo. each	†C
Illinois	2 yrs. College	4 yrs. of 8 mo. each	MX
Indiana	2 yrs. College	4 yrs.—4,000 hours	MX
Iowa	High School	4 yrs.—4,000 hours	†C
Kansas	2 yrs. College	4 yrs. of 9 mo. each	†MX

Kentucky	2 yrs. College	4 yrs. of 9 mo. each—4,000 hours	†C
Louisiana	2 yrs. College	4 yrs.—4,000 hours	†C
Maine	2 yrs. College (2)	4 yrs.—4,000 hours	†C
Maryland	2 yrs. College (3)	4 yrs.—4,400 hours	C
Massachusetts	2 yrs. College	4 yrs.—4,000 hours	†MX
Michigan	2 yrs. College	4 yrs. of 9 mo. each—4,000 hours	†C
Minnesota	2 yrs. College	4 yrs. of 8 mo. each	†C
Mississippi	High School	4 yrs. of 9 mo. each	†MX
Missouri	High School	4 yrs. of 9 mo. each—4,000 hours	†C
Montana	2 yrs. College	4 yrs. of 9 mo. each—4,000 hours	†C
Nebraska	2 yrs. College	4 yrs.—4,000 hours	†C
Nevada	2 yrs. College	4 yrs.—4,000 hours	†C
New Hampshire	High School	4 yrs.—4,000 hours	†C
New Jersey	2 yrs. College	4 yrs. of 9 mo. each	†MX
New Mexico	2 yrs. College (4)	4 yrs. of 4,000 hours	†C
New York	2 yrs. College (5)	4 yrs. of 8 mo. each—4,000 hours	MX
North Carolina	2 yrs. College	4 yrs. of 9 mo. each	†C
North Dakota	2 yrs. College (1)	4 yrs. of 8 mo. each—4,000 hours	†C
Ohio	2 yrs. College	4 yrs. of 9 mo. each—4,000 hours	†C
Oklahoma	2 yrs. College	4 yrs. of 9 mo. each—4,150 hours	†C
Oregon	2 yrs. College	4 yrs. of 9 mo. each—4,000 hours	†C
Pennsylvania	1 yr. College (6)	4 yrs. of 9 mo. each—4,000 hours	†C
Puerto Rico	2 yrs. College	4 yrs. of 9 mo. each	C
Rhode Island	2 yrs. College	4 yrs. of 9 mo. each	†C
South Carolina	2 yrs. College	4 yrs. of 9 mo. each	C
South Dakota	2 yrs. College	4 yrs. of 9 mo. each	†C
Tennessee	2 yrs. College	4 yrs. of 9 mo. each	†C
Texas	2 yrs. College	4 yrs. of 8 mo. each	†C-B
Utah	1 yr. College	4 yrs. of 8½ mo. ea.—4,000 hours	†C-B†
Vermont	2 yrs. College	4 yrs.—4,000 hours	†C
Virginia	2 yrs. College	4 yrs. of 8 mo. each	†MX
Washington	2 yrs. College (7)	4,000 hours	†C-B†
West Virginia	2 yrs. College	4 yrs. of 9 mo. each—4,000 hours	†C
Wisconsin	2 yrs. College	4 yrs. of 9 mo. each	†C
Wyoming	2 yrs. College	4 yrs. of 9 mo. each	†C

Note: All recognized chiropractic colleges require a minimum of 2 yrs. college work as an entrance requirement into a chiropractic college, regardless of statutory requirement.

CANADA

Alberta	Junior Matriculation (8)	4 yrs. of 8 mo. each	*C
British Columbia	1 yr. Canadian College or equivalent	4 yrs. of 8 mo. each	*C
Manitoba	Junior Matriculation	4 academic years	
New Brunswick	Senior Matriculation	4 yrs. of 9 mo. each	*C
Nova Scotia	Senior Matriculation	4 yrs. of 9 mo. each	C

Ontario	Grade XIII	4 yrs. of 9 mo. each—4,200 hours	*C
Prince Edward Island	Grade XIII	Approved college	*C
Quebec	D.E.C. Health Sci. Option		*C
Saskatchewan	Senior Matriculation	4 yrs. of 8 mo. each	*C
Yukon Terr.	No Information	No Information	

Symbols designating Boards: C—Chiropractic. C-B—Chiropractic & Basic Science. MX—Mixed. (Composed of medical and chiropractic members).

†Recognize or utilize National Board of Chiropractic Examiners Certificate. (Some additional states consider on an individual basis).

*Recognize examinations of Canadian Chiropractic Examining Board.

(1) Must include the basic sciences.
(2) Must include English and biology.
(3) Should include six semester hours of biology, chemistry, or physics.
(4) After January 1, 1976, except for those previously enrolled.
(5) Must include six semester hours each in English, physics, biology or zoology, general chemistry, and three semester hours of organic chemistry.
(6) Must include six semester hours each in chemistry, biology, and physics.
(7) For those matriculating on or after January 1, 1975.
(8) A Junior Matriculation Certificate or its equivalent is equal to a high school diploma or its equivalent.

F. Chiropractic in Foreign Lands

Well established in the United States and Canada, chiropractic health care is growing in several foreign countries. The practice of chiropractic is officially recognized and regulated in Switzerland, West Germany, and acknowledged and accepted in the British Isles, Australia, New Zealand, South Africa, Rhodesia, Japan, France, Italy, and Bolivia. Each year, more and more countries are recognizing the values of this unique profession.

The Christian Chiropractors Association places world missions at the heart of its program. Presently contributing to a number of different mission fields, the group looks forward to a constantly enlarging vision of missions. At the present time (1976), the association is represented by chiropractic missionaries in Indonesia, Peru, Quebec, Bolivia, Ethiopia, Monaco, Israel, Hong Kong, Mexico, and the United States.

The central office of the Worldwide Christian Chiropractors Association which serves the association as general headquarters is located at 2224 South College Avenue, Fort Collins, Colorado 80521.

H. Typical Questions Asked

The Department of Public Affairs of the American Chiropractic Association receives large quantities of questions about chiropractic each day. Below are offered four of the most commonly asked questions and their answer:

1. **How do you go about choosing a chiropractor?** It would be a rare community which did not list several doctors of chiropractic within the local telephone directory's yellow pages. In the selection of a particular practitioner to consult, one of the best guidelines is found in the doctor's reputation within his community. Because stringent educational and professional standards are required for state licensure, the public is assured of academic competence and clinical experience—even with recent graduates. However, as in all professions, the personality rapport between doctor and patient is also important. A patient should select a doctor of chiropractic whom he respects, is confident of his ability and comfortable with in the intimate relationship of health care.

2. **How do you know when to use a doctor of chiropractic?** DCs are primary-care physicians, and so defined in federal and state regulations, who serve as portals of entry into the health-care system. Under chiropractic care, a patient is either treated or referred after a comprehensive differential diagnosis arrived at by utilizing an orthopedic and neurologic examination, an x-ray examination, laboratory procedures, or whatever other procedure is deemed necessary to determine what type health care is best suited for the patient's complaint. By consultation and examination, the doctor of chiropractic will arrive at a prognosis under chiropractic care or refer the patient to appropriate care.

3. **Is chiropractic treatment dangerous?** With most rare exception, the answer is a strong "No". Naturally, any form of health treatment contains a degree of inherent hazard if not conducted in a scientific and professional manner. This is why each state requires definite educational criteria along with written, oral, and practical examinations prior to licensure. All states require that MDs, DCs, and DOs be board-qualified, licensed, and regulated according to stringent criteria to assure competency. There is little danger in chiropractic care administered by a licensed practitioner. The dangers of prescription drugs and their iatrogenic threat and of major surgery, both of which are avoided in chiropractic care, represent the over-whelming concern in health science today.

4. **Recognizing that with rare exception the community relationship between medical and chiropractic physicians are cordial and cooperative, how does the American Chiropractic Association interpret criticism from organized medicine at the national level, especially the AMA?** The American Chiropractic Association encourages its members to cooperate within the healing arts whenever such cooperation would enhance the health of an individual or public health objectives. No profession offers a panacea to public health needs, thus much more interprofessional dialogue and cooperation are needed. In regard to the redundant criticisms from political medicine, the ACA places these in the same

category as the AMA's violent criticism of osteopathy, optometry, child-labor laws, mental health programs, group practice, veterans health care, workmen's compensation acts, grant's-in-aid for health, voluntary health insurance, community VD clinics, and other infamous positions of the AMA in this century.

5. **Are chiropractors well educated in the use of diagnostic x-rays, and are full-spine exposures exceptionally dangerous?** Chiropractic education provides more hours of education to diagnostic x-ray than does that of allopathic and osteopathic pre-doctoral education. About 97% of chiropractors utilizes diagnostic x-ray and the full spine x-ray constitutes less than 20% of all x-ray procedures done by doctors of chiropractic. Use of technological procedures as taught in chiropractic colleges, advocated by chiropractic radiological organizations, and under federal and state regulations can result in a full spine x-ray of good diagnostic quality with a smaller dose of x-ray to vital body areas and reproductive organs than would be received if separate films of each spinal area were taken to see the entire spinal column. Properly taken, the full spine study may be superior to the use of films of each spinal region by allowing inter-relationships of the several spinal areas to be better appreciated than might otherwise be possible.